

(11) Wait time characteristics, including total time and engine off/restart cycle schedule.

(12) Preconditioning; duration and type, for example, minimum 2500 rpm idle or minimum 30 mph (48 kph) loaded steady state operation.

(13) CST procedure type, as described in § 86.1439.

(14) Dynamometer ID.

(b) *CST emission data.* For each CST, the information listed in paragraphs (b) (1) through (3) of this section must be recorded with respect to each sampling mode.

(1) The reported exhaust concentrations, i.e., those for which the product of HC+(151*CO) is at a minimum. Round initial test results to the number of decimal places contained in the respective standards expressed to one additional significant figure; round final test results to the number of decimal places contained in the respective standards. Rounding is done in accordance with ASTM E 29–90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see § 86.1).

(2) The test time and mode time at which the reported exhaust concentrations are at a minimum.

(3) Minimum CO+CO₂ concentration (if applicable).

Subpart P—Emission Regulations for Otto-Cycle Heavy-Duty Engines, New Methanol-Fueled Natural Gas-Fueled, and Liquefied Petroleum Gas-Fueled Diesel-Cycle Heavy-Duty Engines, New Otto-Cycle Light-Duty Trucks, and New Methanol-Fueled Natural Gas-Fueled, and Liquefied Petroleum Gas-Fueled Diesel-Cycle Light-Duty Trucks; Idle Test Procedures

AUTHORITY: Secs. 202, 206, 207, 208, 301(a), Clean Air Act, as amended 42 U.S.C. 7521, 7525, 7541, 7542, and 7601.

SOURCE: 48 FR 52252, Nov. 16, 1983, unless otherwise noted.

§ 86.1501–94 Scope; applicability.

(a) This subpart contains gaseous emission idle test procedures for light-duty trucks and heavy-duty engines for which idle CO standards apply. It applies to 1994 and later model years. The idle test procedures are optionally applicable to 1994 through 1996 model year natural gas-fueled and liquefied petroleum gas-fueled light-duty trucks and heavy-duty engines.

(b) References in this subpart to engine families and emission control systems shall be deemed to apply to durability groups and test groups as applicable for manufacturers certifying new light-duty trucks and Otto-cycle complete heavy-duty vehicles under the provisions of subpart S of this part.

[65 FR 59963, Oct. 6, 2000]

EFFECTIVE DATE NOTE: At 73 FR 37194, June 30, 2008, § 86.1501–94 was redesignated as § 86.1501, effective July 7, 2008.

§ 86.1502–84 Definitions.

The definitions in § 86.084–2 or § 86.1803–01, as applicable, apply to this subpart.

[64 FR 23923, May 4, 1999]

EFFECTIVE DATE NOTE: At 73 FR 37194, June 30, 2008, § 86.1502–84 was redesignated as § 86.1502, effective July 7, 2008.

§ 86.1503–84 Abbreviations.

The abbreviations in § 86.084–3 or in § 86.1804–01, as applicable, apply to this subpart.

[64 FR 23923, May 4, 1999]

EFFECTIVE DATE NOTE: At 73 FR 37194, June 30, 2008, § 86.1503–84 was redesignated as § 86.1503, effective July 7, 2008.

§ 86.1504–94 Section numbering; construction.

(a) The model year of initial applicability is indicated by the section number. The two digits following the hyphen designate the first model year for which a section is effective. A section remains effective until superseded.

Example: Section 86.1511–84 applies to the 1984 and subsequent model years until superseded. If § 86.1511–85 is promulgated, it would take effect beginning with the 1985 model year. Section 86.1511–83 would apply to model years 1983 and 1984.

(b) A section reference without a model year suffix refers to the section

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applicable for the appropriate model year.

(c) All provisions in this subpart apply to gasoline-fueled and methanol-fueled Otto-cycle heavy-duty engines, methanol-fueled Diesel-cycle heavy-duty engines, new Otto-cycle light-duty trucks, and liquefied petroleum gas-fueled, natural gas-fueled, and methanol-fueled diesel-cycle light-duty trucks.

[59 FR 48536, Sept. 21, 1994, as amended at 60 FR 34376, June 30, 1995]

EFFECTIVE DATE NOTE: At 73 FR 37194, June 30, 2008, § 86.1504–94 was removed, effective July 7, 2008.

§ 86.1505–94 Introduction; structure of subpart.

(a) This subpart describes the equipment and the procedures required to perform idle exhaust emission tests on heavy-duty engines and light-duty trucks. Subpart A of this part sets forth the testing requirements, reporting requirements and test intervals necessary to comply with EPA certification procedures.

(b) Four topics are addressed in this subpart. Sections 86.1505 through 86.1515 set forth specifications and equipment requirements; §§ 86.1516 through 86.1526 discuss calibration methods and frequency; test procedures and data requirements are listed in §§ 86.1527 through 86.1542 and calculation formulas are found in § 86.1544.

[59 FR 48536, Sept. 21, 1994, as amended at 60 FR 34376, June 30, 1995]

EFFECTIVE DATE NOTE: At 73 FR 37194, June 30, 2008, § 86.1505–94 was redesignated as § 86.1505, effective July 7, 2008.

§ 86.1506–94 Equipment required and specifications; overview.

(a) This subpart contains procedures for performing idle exhaust emission tests on Otto-cycle heavy-duty engines and Otto-cycle light-duty trucks. Equipment required and specifications are as follows:

(1) *Exhaust emission tests.* All engines and vehicles subject to this subpart are tested for exhaust emissions. Necessary equipment and specifications appear in §§ 86.1509 through 86.1511.

(2) *Fuel and analytical tests.* Fuel requirements for idle exhaust emission

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testing are specified in § 86.1513. Analytical gases are specified in § 86.1514.

(b) [Reserved]

[59 FR 48536, Sept. 21, 1994]

EFFECTIVE DATE NOTE: At 73 FR 37194, June 30, 2008, § 86.1506–94 was redesignated as § 86.1506 and the new § 86.1506 was amended by adding paragraph (b), effective July 7, 2008. For the convenience of the user, the added text is set forth as follows:

§ 86.1506 Equipment required and specifications; overview.

* * * * *

(b) Through the 2009 model year, manufacturers may elect to use the appropriate test procedures in this part 86 instead of the procedures referenced in 40 CFR part 1065 without getting advance approval by the Administrator.

§ 86.1509–84 Exhaust gas sampling system.

(a) The exhaust gas sampling system shall transport the exhaust sample from the engine or vehicle to the analysis system in such a manner as to maintain the integrity of the sample constituents that are to be analyzed.

(b) The sample system shall supply a dry sample (i.e., water removed) to the analysis system.

(c) A CVS sampling system with bag or continuous analysis as specified in 40 CFR part 1065 is permitted as applicable. The inclusion of an additional raw carbon dioxide (CO₂) analyzer as specified in 40 CFR part 1065 is required if the CVS system is used, in order to accurately determine the CVS dilution factor. The heated sample line specified in 40 CFR part 1065 for raw emission requirements is not required for the raw (CO₂) measurement.

(d) A raw exhaust sampling system as specified in 40 CFR part 1065 is permitted.

[48 FR 52252, Nov. 16, 1983, as amended at 60 FR 34376, June 30, 1995; 70 FR 40441, July 13, 2005]

EFFECTIVE DATE NOTE: At 73 FR 37194, June 30, 2008, § 86.1509–84 was redesignated as § 86.1509, effective July 7, 2008.

§ 86.1511–84 Exhaust gas analysis system.

(a) Analyzers used for this subpart shall meet the following specifications: